

BARG Newsletter January 2026 BARG HAMVENTION

1st February 2026

***Ballarat Amateur Radio Group Inc. #6953T
January 2026 Monthly Newsletter***

**Next Meeting
Saturday 31st of January 2026 10:00AM
At the Airport - All Welcome**



Contacting us
BARG@BARG.ORG.AU

We're on the web.

www.barg.org.au

https://twitter.com/vk3_barg

<https://www.facebook.com/groups/VK3BML/>



The VP's Ramblings.....	3
FreeDV.....	3
ZL Prefix Swap from the WIA Broadcast Jan 11th	4
WIA 2026 ELECTION NOTICE.....	4
The next BARG General Meeting.....	5
Youth Net on the Link System.....	5
Digital Library of Amateur Radio & Communications (DLARC)	5
How Not to Activate a Park.....	6
BARG 2026 HAMVENTION	8
From Ferric Chloride to 124 Layers.....	9
LARCset 40m QRP Kit.....	10
How the Field Radio Landscape Has Changed	13
IRCs to cease in 2026 from WIA Broadcast, 4th January 2026	17
Licensing and Exams in the UK.....	18
Magazine Reviews.....	21
QST Review January 2026	21
Silicon Chip Review January 2026	23
SPRAT Review Winter 2025/2026	24

Front Page; Scenes from previous BARG Hamventions.

Times and dates of nets as below

Club Nets: VHF NET: Every Tuesday Night at 8 pm on 146.750 MHz - VK3RBA

HF NET: Every Thursday Night at 8 pm on 3.608 MHz - VK3BML

6m NET: Every Tuesday Night at 8:30 pm on 53.650Mhz RX / 52.650Mhz TX - FM
with a 91.5 tone - VK3RWU

LINKED REPEATERS: *The local VK3RBA-70cm repeater on Mt Buninyong is part of a network of linked repeaters covering North-Western Victoria.*

Access details for this repeater have recently changed.

*For full details of this linked network and access details
see <https://www.grz.com/lookup/vk3rba>*

You can listen to the system live <http://vk3rba.dyndns.org:441/>

This linked system may be accessed via IRLP node 9503

BARG inc. OFFICE BEARERS

President	Vacant	Ordinary Member	Tom George VK3DMK
Vice President	Colin Consiglio VK3NCC	Ordinary Member	Ian Fairweather VK3YFD
Secretary	Peter Westgarth VK3APW	Ordinary Member	Doug Ellery VK3DRE
Treasurer	Jeff Rickerby VK3JHR	Ordinary Member	David Martin VK3KQT
Ordinary Member	Craig Cook VK3KG	Ordinary Member	Ben Daniel VK3NRD



The VP's Ramblings.



Greetings everyone,

It's the first month of a new year. Yes, Hot Cross buns did appear on Boxing Day last month, and I've already seen chocolate easter bunnies in the stores!

The coffee morning gatherings at the club rooms continue to be well patronised. If you're free on Thursdays, consider spending some quality time with good people.

By the time you read this, Hamvention 2026 will be a mere few days away. If you haven't yet considered taking up a table to convert some of your preloved gear into cash, you may be too late, but you could still ask if you wish; Otherwise remember we need and would value assistance on the Saturday and Sunday.

The January general meeting will be short one on at 10:00AM Saturday the 31st January 2026 (rather than the Friday evening), and then lead into the Hamvention setup operations at the Polocrosse Club, which should be complete by 13:30. Many hands will make it all happen so much easily and faster.

If you are not currently a member you would be very welcome to apply now in time to be involved with the BARG's biggest activity of the year. You won't be disappointed.

(Goal for 2026 -- do you think you might be able to introduce BARG to a non-member??)

Thought for the month: all members have the opportunity to use the club rooms and facilities at any time. If you need access, please contact a committee member for details. For safety considerations, if you attend on your own you should advise a committee member before you go and after you leave.

My continued thanks to the committee and members who keep things ticking over.
I am looking forward to the New Year.

Cheers, 73 Colin VK3NCC.

FreeDV

There has been some activity in the club with some hands-on demonstrations of FreeDV, HF digital voice.

If you want to listen or take part in a FreeDV contact, **after** the BARG 80m Net ,
[Every Thursday Night at 8 pm on 3.608 MHz - VK3BML](#)

A few stations have fired up FreeDV for a conversation, any amateur operating FreeDV is free to join and chat.

WIA 2026 ELECTION NOTICE

Update for the 2026 Election of Directors of the WIA

As you are aware there were four nominations received for the three Director roles that will be vacant at the end of the WIA AGM in May 2026.

Therefore, in accordance with the Election Regulations, an election will be held by Ballot.

I have announced that the candidates for election are:

Chris Dimitrijevic	VK3FY
Klaus Illhardt	VK3IU
Lee Moyle	VK3GK
Justin Giles-Clark	VK7TW

The election ballot will commence on 1 February 2026 and close on 28 February 2026.

Peter Cherry WIA Returning Officer.

ZL Prefix Swap from the WIA Broadcast Jan 11th

The New Zealand Association of Radio Transmitters was created for the country's ham radio operators 100 years ago in Auckland on the 16th of August. Not looking to miss out on a full-scale celebration this year, hams have already begun marking the occasion with modified callsigns.

John Williams VK4JJW joins us with a report he has filed for Newline: -

"How do you show pride in the group that has come to represent and advocate for amateur radio in New Zealand? One way is to drop the "ZL" prefix and swap it out with "ZM" during the centenary year of 2026. So be listening! The "ZM" prefix is a recognised special event callsign in New Zealand and has been used before. This occasion is a far happier one than the previous authorisation by Radio Spectrum Management, which allowed the use of "ZM" during the period of the COVID-19 lockdown.

Don't worry, the "ZL" prefix isn't going away for the year. You'll see be hearing for special event callsigns such as ZL100MVL and ZL100AM, which have been approved for use until 31 March.

This is John Williams VK4JJW."

The next BARG General Meeting

10:00AM Saturday 31st of January 2026

Youth Net on the Link System

Sunday Evenings

7:00PM Local AEDT



Digital Library of Amateur Radio & Communications (DLARC)

The Digital Library of Amateur Radio & Communications (DLARC) is an online archive dedicated to preserving the technical, historical, and cultural record of amateur radio and related communications fields.

Operated by the Internet Archive in partnership with leading radio organisations, DLARC provides free public access to magazines, books, manuals, newsletters, and conference proceedings, many of which would otherwise be lost to time, dust, or the back shed.

<https://archive.org/details/dlarc>

With the kindness of Steve N8GNJ who edits an online Amateur Radio newsletter called, Zero Retries, Ballarat Amateur Radio Group newsletter has been nominated for inclusion in this growing international archive. This ensures our local activities, technical articles, and club history will be preserved and accessible to amateurs, researchers, and future generations worldwide.

<https://www.zeroretries.org/>

How Not to Activate a Park

I thought some may be interested in my parks activities over the last three months of 2025. It wasn't as successful as I'd hoped. :-)

Canberra Attempt

Back in October, Peter (VK3PWG) and I travelled to Canberra for the annual VKFF get-together. On Sunday, we had time to activate a park in the Canberra area. We first stopped at Mt Stromlo and the NASA Deep Space Centre—both well worth the visit—before heading to Tidbinbilla.



The weather wasn't great, so we drove the tourist circuit before setting up in a picnic shelter surrounded by kangaroos. We managed about 20 contacts before heading back for the evening meal with the group.

Later, while submitting the logs, I checked the map and discovered we weren't inside the park boundaries. That meant the activation didn't count toward the WWFF program.

Lesson 1: Always check the map!

Lerderderg State Park Attempt

A few weeks later came the VKFF activation weekend—another great opportunity to get out and make contacts. This time, I decided to combine the activity with a walk and tackle VKFF-6332, Ruths Gully which is off the side of the Tunnel Point Loop walk in Lerderderg State Park. With the FT-817 in my pack, I walked about 5 km and found a beautiful spot on a ridge overlooking a creek 100 m below.



After setting up the radio, I noticed no change in noise levels when I plugged in the antenna. A quick check revealed intermittent noise, then nothing. No amount of tinkering could fix it. I packed up and finished the walk without making a single contact.



Back home, I discovered the problem: the centre pin in the BNC connector had pushed in.

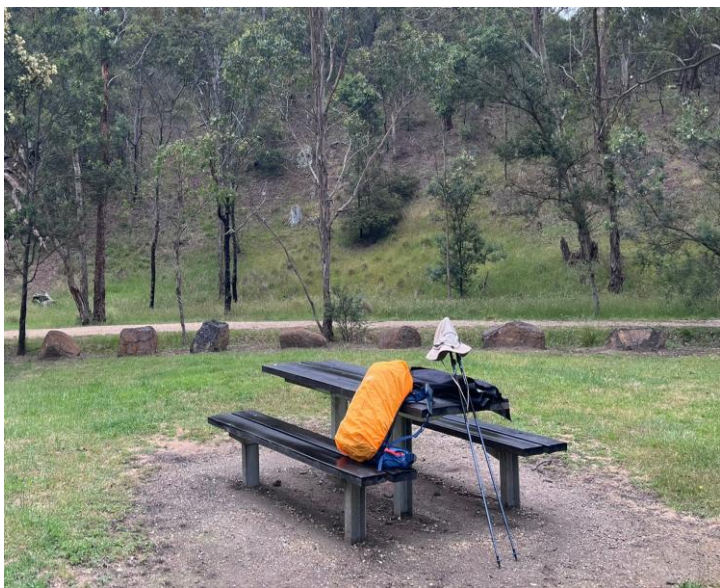
Lesson 2: Check your gear and carry spares for the small stuff.

Brisbane Ranges Attempt

Two weeks later, I tried again—this time in the Brisbane Ranges. The target park was best accessed on foot. The forecast predicted rain, and the day started cool and cloudy. I hoped it would clear as I walked deeper into the park.

I found a good spot well inside the boundary and began setting up. Just then, a few large drops of rain fell, followed by distant thunder. With no shelter and a 10-minute tear down time, I decided to pack up immediately. Better safe than sorry.

Ironically, the rain held off until I was back at the car a couple of hours later—then it bucketed down.



Lesson 3: Check the weather and plan accordingly.

Apollo Bay Attempt

My last attempt for 2025 was just before Christmas at Apollo Bay. Some parks there are only accessible on foot via the Great Ocean Walk including VKFF-6341 Stony Creek (Otways).

I started from Shelly Beach car park, walked down to the shoreline, then inland to the first walk-in camping area.

It was nearly lunchtime, and I had the place to myself. I set up the radio on a table and fired up the logging tablet. That's when I realised, I hadn't packed the radio battery. It was sitting on a shelf back home. Doh!



For the third time in a row, I packed up without making a single contact. At least the walk was fantastic.

Lesson 4: Make sure you take all the gear!

Looking Ahead

Hopefully, my activation attempts will be more successful in 2026.

73 & 44 Malcolm VK3OAK

BARG 2026 HAMVENTION



BALLARAT AMATEUR RADIO GROUP 2026 Hamvention Sunday 1st February 2026

Bring, Buy, Swap, and Sell Amateur Radio based equipment.

Ballarat Polo-Crosse Club's Facility, 207 Airport Road, Ballarat Airport.

Deadline for table bookings, 5:00pm, Thursday 22nd January 2026 or unless all allocated.



This space needs some content!!!!

Anything, no matter how small or big, educational, technical, humorous, historical or hysterical.

The editor Tom VK3DMK tomvk3dmk@gmail.com

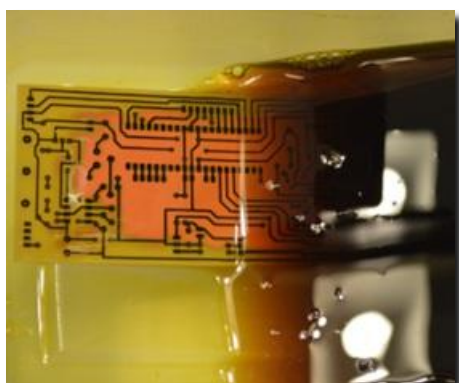
From Ferric Chloride to 124 Layers

Contributor Tom, VK3DMK

For many amateur radio operators and electronics enthusiasts, printed circuit boards didn't start with online ordering and professionally finished multilayer designs. They started at the kitchen table, in the shed, or in the workshop — usually accompanied by strong chemicals, improvised tools, and a fair bit of patience.



Early homebrew PCBs were typically single-sided copper-clad boards. Track layouts were often created using Bishop Graphics dry-transfer pads — rub-on tracks, pads, and symbols that demanded a steady hand and careful planning to make a negative transparency, or even simpler, the etch resist pen. One misplaced transfer and it was time to scrape copper and start again.

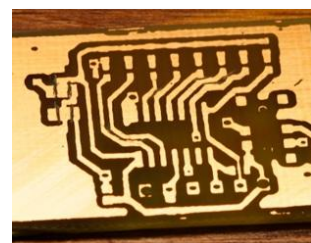


Once the layout was complete, the copper was protected with etch resist, commonly Kodak resist products, applied with a brush or spray. Ventilation was variable, enthusiasm was high, and success was never guaranteed.

If you made a transparency, then exposing the treated board meant firing up the UV lamp.

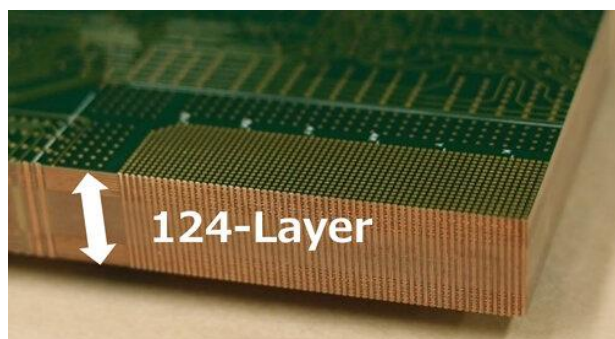
If you used the etch resist pen directly on the copper, then you went straight to etching your creation.

Etching was carried out using either ferric chloride — effective, messy, and permanently staining — or ammonium persulphate, which offered a cleaner and more transparent alternative or an acid/peroxide mix that violently etched your precious PCB. Boards were etched by hand, agitated in plastic containers, rinsed in the sink, drilled manually, and finally inspected with equal parts pride and relief.



Graduating from single-sided to double-sided boards felt like a major achievement. Plated-through holes were rare in-home workshops, alignment was critical, and reliability improved only with experience. These early methods taught valuable lessons in layout discipline, spacing, and why good PCB fabrication really matters.

Fast forward to today, and services such as PCBWay and JLCPCB allow hobbyists and professionals alike to order high-quality multilayer boards — complete with solder mask, silkscreen, and plated vias — at remarkably low cost. What once took days of manual effort can now be achieved with a few uploaded files.



At the extreme end of this evolution sits OKI Circuit Technology, which has recently announced a staggering 124-layer printed circuit board developed for advanced semiconductor and AI testing equipment. Remarkably, this level of complexity has been achieved without excessive board thickness, highlighting just how far materials, processes, and precision manufacturing have advanced.

From ferric chloride-stained fingers to industrial-scale multilayer engineering, the journey of the printed circuit board mirrors the journey of electronics itself — denser, faster, cleaner, and ever more capable. <https://www.oki.com/global/press/2025/z25006e.html>

LARCset 40m QRP Kit

Contributor Peter VK3PWG

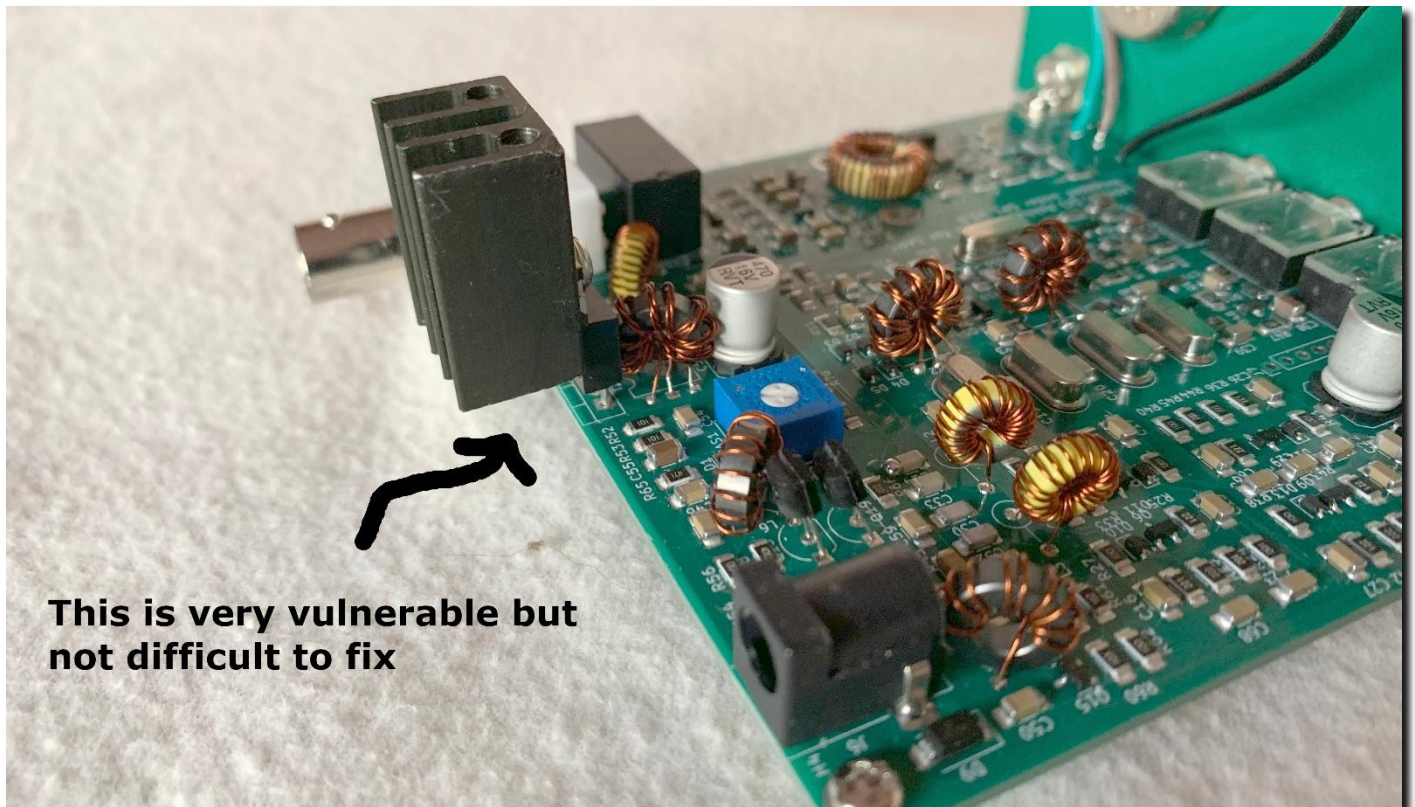
What is it?

For those unfamiliar with this little rig it is the latest iteration from HF signals of BitX40 fame, you can read all about it on their web page, link is at the bottom. The LARCset, based on the BitX40, is a low cost, simple to build SSB, CW rig.

Just before Christmas you may have seen on the club emails an opportunity to join with me in buying a block of 5, this was very quickly fulfilled with early December being their first shipment. A couple of days before Christmas they arrived and were distributed to those participating.

Assembly

What you get is a board with SMDs installed and a bag of bits, just leaving you with a few through hole components, a handful of toroids to wind and a few pre-wound trifilar to install. By closely and carefully following the very straight forward manual, you will finish up with a quite capable QRP transceiver ready to put into an enclosure of your choice and apply your power source.



This is very vulnerable but not difficult to fix

Testing

As you build this nicely presented little rig, there are some easy-to-follow testing procedures that don't need any special tools or equipment. Providing you have taken care with your soldering; it should all go to plan.

Performance

Now that you've finished, how does it perform? Well, it's early days yet, and after some initial testing by one builder, Bob VK3BNC, there has been some consideration to a modification. This modification is not absolutely necessary, but a really nice to have for

tuning. The addition of a 470Ω pot as an RIT makes this little rig a very good receiver and very easy to tune to transmitting stations.

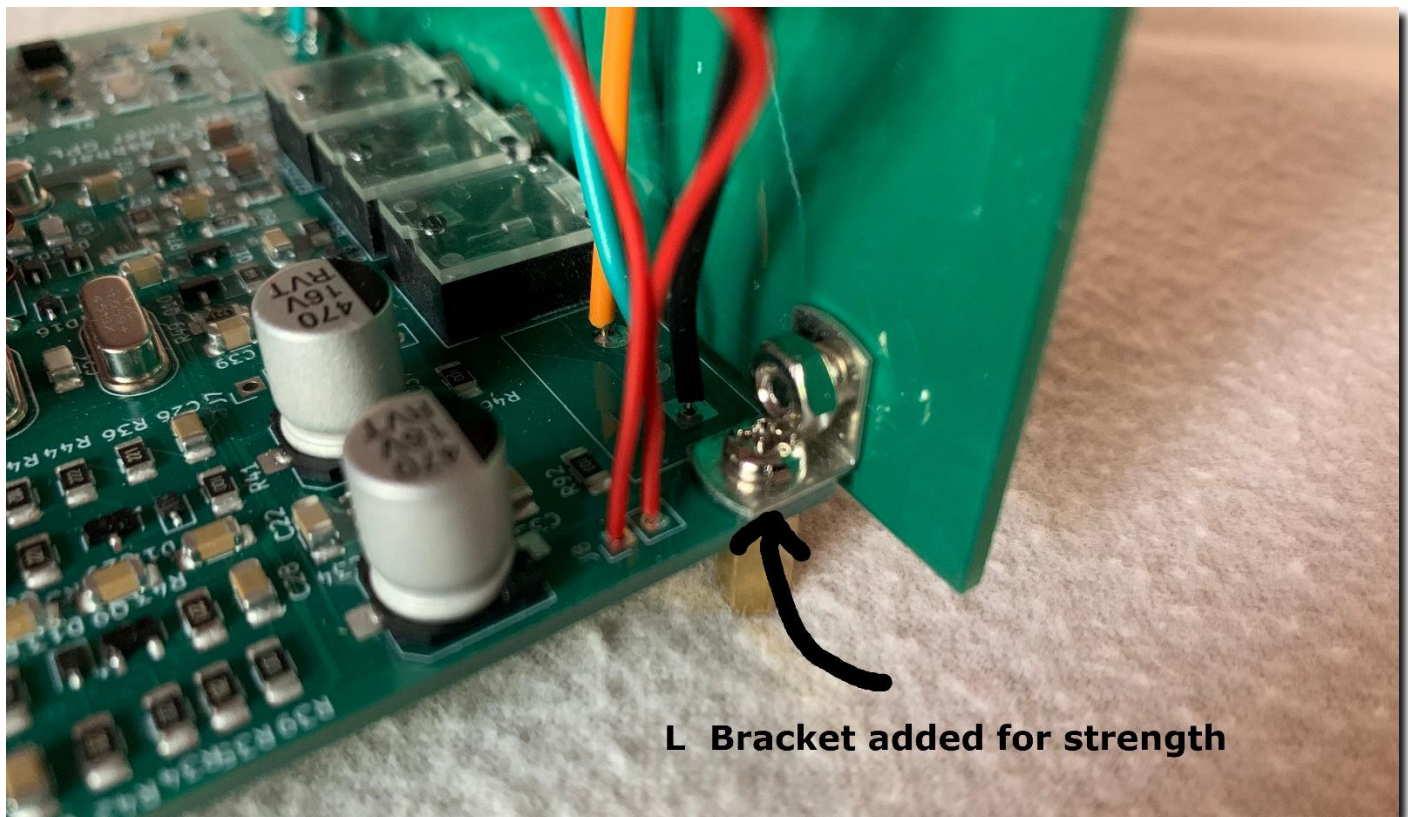


Having finally got one working just last Thursday with the addition of the RIT, I found several SSB stations operating and was receiving them very well. As I haven't got the microphone organised for it yet, I could not attempt to transmit.

The following evening, again listening around I heard some CW, and listened for a while and could identify both stations, one of whom was known to me. Bear in mind here for a moment, my CW is not good, in fact very rudimentary, then me thinking I might just get a signal out to the one I know and he'll be understanding, hihi. Anyway, long story short, I plugged in my key and sent my call sign, that's when I got the fright of my life . . . VK7TO replied (not the one I know), asking me to repeat, so I sent my callsign again very badly, he replied with RST 539. Now that's pretty low, but into Tasmania, I reckon that's not bad. The QSO didn't last long, and I think he soon noticed that I was struggling, however I did get his name and he was on Bruny Island.

Summary

At this stage it's too early for full report and I still have a couple of things to improve upon, but it is looking like be a worthwhile exercise. On the downside, if there is one for such a low cost unit, the front panel is a little bit of a weak point and the Mosfet with its heatsink is very vulnerable at the back of the board. Both issues are easy to overcome with a little bit of ingenuity that we all have.



So, for \$58AUD and a bit of time and patience, you get yourself a pretty good little QRP rig. If you wanted to build one yourself, just do what I did and get 4 other amateurs to join in, buy a block of 5 and you're on your way. You could buy just one, but the price per unit would be probably double due to freight costs. For further information, jump on their web site, that's all I did. I doubt there are any other QRP rigs for such a low price.



Further Information - <https://www.hfsignals.com/index.php/larcset/>
Cheers Peter VK3PWG

How the Field Radio Landscape Has Changed and Why There's Never Been a Better Time to Jump In!

Reprinted with kind permission from Thomas Witherspoon — K4SWL / M0CYI / VY2SW
From QRPer.com [January 15, 2026](#)

Over the past few months, I've received a steady stream of emails and comments that have all landed in the same place in my mind: **just *how much* the field radio space has changed, especially in the last five or six years.**

The more I thought about it, the more I realized that field operating may be the fastest growing and most dynamic segment of amateur radio over the past decade. It has also been a catalyst for an incredible amount of innovation, accessibility, and community support—so much so that I genuinely believe there's never been a better time to get started with field radio.

What follows is not an exhaustive list. It's simply a snapshot of what's been on my mind lately as I reflect on how different things feel compared to 2016—and even compared to just 5-6 years ago. I'm certain I'm missing things, so I hope you'll add your own observations in the comments.

Field-Portable Radios: From Afterthought to Center Stage

Ten years ago, field-portable radios felt like a niche within a niche. I remember speaking with marketing staff from major manufacturers at Hamvention prior to the [2016 National Parks on the Air \(NPOTA\) event](#), and several told me there simply wasn't much interest in QRP or truly portable radios. The focus was squarely on shack-based stations, radios you might occasionally take to the field, or contest-grade rigs.

Then came National Parks on the Air in 2016, and everything shifted. Manufacturers suddenly saw just how much energy and excitement existed around field operating. Elecraft—one of the larger manufacturers who've always invested in the field radio space—couldn't have timed the introduction of the KX2 ([at Hamvention 2016](#)) any better.

At the time, there were very few new field-portable radios coming from major manufacturers, though small builders like LNR Precision were already innovating.

Fast-forward to today and the landscape looks *completely* different. Icom introduced the IC-705 in 2020, Yaesu followed, last year, with the FT-X1 Field, and several other manufacturers—large and small—now treat field portability as a serious design priority. What once felt like a fringe market is now firmly established.



Affordable QRP SSB

One major innovation has been the availability of sub-\$300 QRP SSB radios. Years ago, running low-power SSB at this price point usually meant buying a used, full-size radio and adapting it for field use. Today, there are multiple SSB-capable radios available for under \$300US—and even under \$200US.

The (tr)uSDX even has a built-in microphone.

Radios like the (tr)uSDX and the QRP Labs QMX show up regularly in field reports, and for good reason. Xiegu's G106, a multi-band, multi-mode radio priced just over \$200US, is another example. It's not the best radio I own, but it works—and it works on a very small battery. I often run mine on a modest 3-amp LiFePO₄ pack and have used it successfully on both SSB and CW.

The G106 even has a simple spectrum display!

When I was first licensed in 1997, I paid over \$700US for a used Icom IC-735. I loved it, but it was heavy, power-hungry, and only marginally field-portable. If today's affordable, compact radios had existed back then, I honestly wouldn't have known what to do with myself!



The CW Renaissance

I've said it before here on QRPer, and I still believe it: [we're living through a CW renaissance](#). The number of people learning Morse code and getting on the air continues to amaze me.

[illegible]

One new CW op recently told me that they once supported removing CW requirements, believing it to be a dead and unnecessary mode. Now—in their words—they are happily eating a bit of humble pie! I'd argue the CW community today may be larger than it's ever been, outside of the very earliest days of amateur radio.

When I began activating POTA in 2019, spotting was a real concern, especially for SSB operators in areas without mobile phone access. If I wasn't sure there would be mobile phone coverage, I relied on friends listening on a predetermined frequency, at a predetermined time, ready to spot me manually.

Today, off-grid spotting options have exploded. Tools like [SOTAmat](#) have been transformative for SSB operators, allowing activators to spot themselves using audio-generated digital signals and a simple smartphone app—no satellite subscription required.

The Rise of Cottage-Industry Manufacturers

Tufteln, for example, makes a wide array of field op accessories, including magnetically attachable custom faceplate protectors.

One of my favourite developments has been the growth of small, operator-led businesses in the field radio space.

Antennas, packs, pouches, cables, dongles...you name it. Many of the accessories I rely on today come from passionate individuals who saw a need and decided to build something better.

Spooltenna is a husband/wife team that started only one year ago and now their products are being used across the planet!

These small companies inject



16 QS	SPOTS	MAP	OPER.
Today	16 QSOs		✓
20:09z	14.060.5	N4REE	FL 529 5
20:10z	14.060.5	N4PW	LA 559 5
20:11z	14.060.5	N2EIM	NJ 549 4
20:12z	14.060.5	WB2MQQ	NY 559 5
20:14z	14.060.5	NE3J	PA 529 2
20:14z	14.060.5	KB4VU	FL 559 5
20:15z	14.060.5	AI5DD	539 5
20:16z	14.060.5	VA3UZ	ION 559
20:17z	14.060.5	KE3C	PA 539 5
20:18z	14.060.5	KB2DMW	NY 559 5

20:20:42z 14.060.500 MHz

16 QSOs in 14m 36s • 2m 7s
since last QSO
67 Q/h for last 10

Their Call Sent 599 Rcvd 599 State

innovation and energy into the hobby, and I firmly believe they make the entire field radio ecosystem stronger.

Logging innovations

Many of you know I still log on paper when filming field activation videos. I like being present in the moment, and paper logs are easy for viewers to follow. When I'm not filming, though, apps like [PoLo](#) have completely changed the game for me.

In the early days of POTA, logging meant paper or a laptop/tablet in the field, ADIF files formatted and exported correctly at home, emails to coordinators with attached files, and sometimes a full day's wait for validation. Today, we can upload our own logs directly (*side note: at least SOTA activators were able to do this much earlier on*), use web-based loggers, and even generate multiple logs automatically for joint activations via apps like PoLo. The difference is staggering and entirely for the better.

The POTA Community Explosion

While Parks on the Air isn't the first field activity—[WWFF](#) and [SOTA](#), among others, paved the way—it's hard to overstate POTA's impact over the past six years. It made field operating approachable, flexible, and welcoming.

A POTA activation in May 2019: note that I adapted some of WD8RIF's bespoke log sheets for my own purposes!

When I started activating in 2019, many parks were ATNOs, and getting ten contacts could be genuinely stressful. I relied on a small core group of dedicated hunters who saved my bacon more times than I can count. To “get our ten” we activators tended to work the same hunter on multiple modes and bands.

I still remember the POTA gathering at Hamvention 2019: about 40 or 45 of us under a pop-up tent outdoors? Fast-forward to last year, and POTA events *filled* Hamvention’s large indoor forum spaces (three different forums were POTA-focused, if I recall correctly).

Yesterday? I logged ten contacts in the first eight minutes of my activation. In those early days of POTA? That was the stuff of wild dreams!

Field Radio on YouTube

When I started my YouTube channel in earnest in 2020, there were relatively few channels focused primarily on field radio and POTA. Today, YouTube is chock-full of them. The enthusiasm is contagious, and while the sheer volume can be overwhelming for newcomers, I see this as an overwhelmingly positive development.



Final Thoughts

These are just a few of the changes that come to mind, but I know there’s much more to the story.

Cheers. Thomas Witherspoon — K4SWL / M0CYI / VY2SW
<https://www.youtube.com/@ThomasK4SWL>



IRCs to cease in 2026 from WIA Broadcast, 4th January 2026

Although International Reply Coupons, or IRCs, are still being used by some DX-chasing hams in their requests for QSL cards, that option is set to end by this time next year.

Countries belonging to the Universal Postal Union have voted to discontinue their use effective 31 December 2026. The vote was taken in September at the 28th Universal Postal Congress held in Dubai. There are several IRCs already in circulation that bear the expiration date of 31 December 2025 and they are expected to be honoured for another year.

In an era marked by a migration toward confirmations on digital platforms and in digital QSOs, the move brings an already disappearing amateur radio practice to its conclusion. A statement from the Universal Postal Union said the sunset of the IRC, first put into practice in 1907, was [quote] a natural progression within the broader transformation of international postal services in alignment with the digital practices and modern outlook of their customers.

<https://www.upu.int/en/universal-postal-union/activities/philately-ircs/international-reply-coupons-ircs>

https://en.wikipedia.org/wiki/International_reply_coupon#cite_note-13

Licensing and Exams in the UK.



Copied from a message in gqrp@groups.io
Reproduced with permission from contributor Steve, G0FUW.

As a training provider I sensed from the recent messages that not everyone understands the current UK Licence exam regime. Here is my attempt at a position statement....

There are a number of routes to get the UK Full Licence:

Progressing through the three levels, in order; Foundation, Intermediate and Full. That involves doing three exams of increasing difficulty, with increasing Licence privileges. In short, 25W max for Foundation, 100W max for Intermediate and 1kW for Full. Some bands have lower power levels and only the Full Licence gives access to the 600m and 60m bands and automatic CEPT recognition for overseas operation. The three exams together cost about £120. There is no compulsion to progress and for QRP a Foundation Licence give more than most folk ever need.

Direct to Full. This is a single exam, with two papers, that covers the whole of the three levels. Questions are weighted towards the top end. The pass mark is higher than in the other levels and both papers must be passed at the same sitting. The Direct exam is about £100.

CEPT HAREC. Anyone holding a Class 1 Licence in a country that has signed up to the CEPT HAREC recommendation can apply for a UK Full Licence with no need to complete any further exams.

Temporary Reciprocal arrangements. For amateurs from countries not signed up to CEPT HAREC, Ofcom will recognise some Licences and issue Full (temporary reciprocal) licences which cost about £20 and have to be renewed on a regular basis.

Most folk go through the 3-level progression route. I recommend that to anyone who asks because each exam only tests one textbook's worth of knowledge/understanding, the pass rates are higher than the Direct route and, if you are starting from scratch, the progression route allows you to get a Foundation licence quickly and get on the air whilst you learn the rest. The exception to that is where learners are pre-qualified in RF engineering, or electronics; that is who the Direct route is intended for.

Some sit their exams in Clubs or Schools with in-person invigilators, but the vast majority of exams are now sat on-line, from home, with remote invigilation. The exam software is fully secure so candidates cannot surf the internet to find answers, and the remote invigilator ensures they are not looking at textbooks, etc during the exam.



CEPT HAREC

(Harmonised Amateur Radio Examination Certificate) is a standard certificate for amateur radio operators, established by the European Conference of Postal and Telecommunications Administrations (CEPT).

It facilitates reciprocal licensing and operation in participating countries by proving you've passed a standardized high-level exam.

It allows operators to get a local license or temporary permit in another member country without taking a full new exam, making it easier to operate internationally, especially for longer stays.

I lead the Bath-based distance learning courses for Intermediate and Full.

<https://moodle.bddl.org.uk/>

The team is 20 tutors strong, and the latest Intermediate course has just started with 138 students. Even though the exam does not require it, we encourage all to do practical work using solderless breadboards to make circuits and take measurements with a standard multi-meter.

No surprises - those who do the hands-on learning do better in the exam than those who do not. Our average pass rates are 96% for Intermediate and 85% for Full. The rest of the UK pass rates are 85% and 60% respectively. We are very proud of our results and are approaching 1200 passes at the top level since we started in 2011.

If anyone wants to get a feel for what the standards are like, there are sample papers for all three levels, and the Direct to Full on the RSGB website: <https://rsgb.org/main/clubs-training/training-resources/mock-exams/>

I am also a Trustee for the Radio Communications Foundation charity, and we fund, on request, Foundation exams for young folk in the UK who are in full-time education. If anyone would like to donate to the charity to help us do more, follow this link:

<https://commsfoundation.co.uk/donate>



RADIO COMMUNICATIONS FOUNDATION

73, Steve, G0FUW

A mate of mine recently admitted to being addicted to brake fluid. When I quizzed him on it he reckoned he could stop any time...

I went to the cemetery yesterday to lay some flowers on a grave. As I was standing there I noticed 4 grave diggers walking about with a coffin, 3 hours later and they're still walking about with it. I thought to myself, they've lost the plot!!

My daughter asked me for a pet spider for her birthday, so I went to our local pet shop and they were \$70! blow this, I thought, I can get one cheaper off the web.

Statistically, 6 out of 7 dwarves are not happy.
Studies show cows produce more milk when the farmer talks to them.
It's a case of in one ear and out the udder.

I used to date a girl with one leg who worked at a brewery.
She was in charge of the hops.

The Chinese chef who specialises in UK cuisine is Iris Chew

I told my carpenter I didn't want carpeted steps.
He gave me a blank stair.



Mills On The Air 2026

Celebrating
30 Years

Saturday 9th to Sunday 10th May

CALLING ALL RADIO AMATEURS!!

The 30th anniversary of Mills on the Air in conjunction with National Mills Weekend (run by S.P.A.B.)

This year we are inviting Mills and Radio Amateurs from around the World to take part in this unique event. Bringing Amateur Radio to locations that are typically seen only by Mill enthusiasts and Walkers!

Mills on the Air began back in 1996, when our founder happened to spot a call out on the RSGB Newsfeed for a few Amateurs to set up at a select few Mills around the country to operate on the National Mills Day.

This turned into a decades long event that now had more than 300 operators and clubs taking part from the UK, The Netherlands, Finland, Australia, South Africa and many more locations!

It is free to take part, but we do encourage you to give a donation to your local Mill to help them with their fundraising efforts. Many are run by volunteers and every penny helps!

We are open to all Amateur Radio Bands and Modes and this year, there are DMR groups set up specifically for us!

(more details can be found on our facebook page)

If you would like to take part, please visit our website to sign up!

www.nharg.org.uk/mota

We have regular updates on our Facebook page, including interesting histories of the Mills taking part!



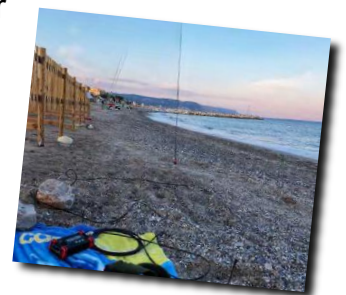
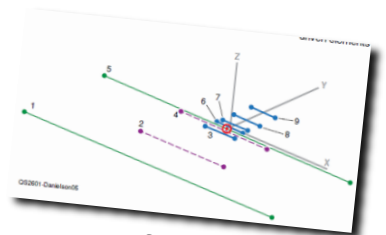
www.facebook.com/MillsontheAir

Photograph by Jack Dwarswaard - Kinderdijk Polder Mill

Magazine Reviews

QST Review January 2026

- P9 Second Century. All about the year of the club.
- P13 Club Spotlight. W5QX San Angelo Amateur radio club. Down in Texas. But as an affiliated club with ARRL why not have an insert about BARG and our activities here. How about publicity officer.?
- P24 Correspondence page covers a range of members topics.
- P30 Open TNC: An open-source Packet Radio Controller.
- P33 A Coupled Resonator TRI-Band Yagi. This allows coverage on 2 and 6 metres as well as the 70 cm band. For all homebrewers it's a simple construction and may give you some ideas,
- P36 An Introduction to THz [Optical] communications. Some very simple ideas for setting and focussing the Tx laser diode and the solar cell on the receiver. Two very basic circuits given for the Tx and the Rx modules. Use an LM386 in the Rx and two bipolar devices in the Tx lineup. [2N3904] With some basic optics and PVC pipe a longer range may be achieved,
- P40 Review Wouxun KG-Q10H Quad band handheld unit.
- P45 Review RigSelect PRO. Radio switch and SO2R+ Controller.
- P48 Review DIEX DXM60 60M Dipole. Breaks down with mast poles and loading coils and brackets.
- P52 Ask Dave has turned into a very popular segment and now he discusses Propagation, Radials and Coax.
- P57 Microwavelengths. Back packing a microwave dish may not be a consideration for most users at 10GHz but WB6CWN has been able to Consider a PATCH antenna as used in space technology. Gain is about 25dBi And another idea uses cardboard cutouts with copper or aluminium foil and make a Horn antenna which collapses flat and much easier to transport.
- See
<https://w1ghz.org/xvtr/Simple and Cheap Transverter for 10GHz-2024 update.pdf>
- P58 POTA in Liguria. CQ in among the Olive trees. By IX1CKN.
- P60 A Homemade 6.4Meter EME Dish. By Henry SM0JHF
Finding a dish of this size is not easy so why not build your own like Rafael SP9VFD has done. ??
https://ok2kkw.com/eme/Trenton/papers/SP9VFD_how_to_Start_on_Microwave_EM_E_Using_Homebrew_Equipfment.pdf Now why don't we see antennas like this around town nowadays.?
- P63 Thinking of going to Monaco and operating there. ? Better read this article about some of the Do's and Don'ts allowed. Its not really that bad but better prepared.
- P66 April 2026 spells the Centenary of the ARRL setting up its various sections



And showing the subsequent changes in department names to reflect its ongoing development.

- P71 Maybe interested in the dealings of the American FCC and regulations affecting amateurs in the US. Well the FCC has announced its intention to Delete part of the 97 Provisions affecting amateur radio there.

They are considered obsolete wireless regs but may be of interest to some.

- P80 Club Station. Encouraging club activities and to assist newer members the York County radio society K4YTZ wanted to get members active and started a practical kit building activity, While its not all about assembling kits there has been a number of club projects run in our club [BARG] over the years. Many ideas may be thrown about at meetings but there is always a small group who are prepared to pitch in on these projects and to help others to learn some skills in hqndling the tools but to finnish up with a working project. Worth considering what you may like to build but need some further encouragement [meaning a push and a shove"]

- P82 Ham Media Playlist. The Commschannel. www.youtube.com/@The_Comms_Channel. Want to find what MESHSTATIC is about? Read the APRS Bulletin board, work the ISS or set up your APRS station. https://tinyurl.com/TCC_ISS.

- P84 How is DX. ?

- P86 Propagation on 6M between North America and Europe, Africa and Saudi Arabia. There was a opening on 6M on 12 Oct between North America and Argentia

- P96 Looking Back,,,Feb 1976

- P98 Classic Radio: Collins contributing to Ham Radio Technology. From WW2 designs the 75A and 75A-1 to KWS-1 series. Their success attributed to their local oscillators and ability of a tuneable first IF . These early developments lead other manufacturers like R L Drake, Cosmos Industries, and Heathkit and Collins to bring models that were more stable, had better bandwidth on upper 10 and 11 metre sections.

Collins then developed the famous mechanical filter that gave excellent selectivity for receivers and also meant that SSB signals could be generated within their transceivers, Ranged from 250 to 500 kHz the well-known Collins using 455kHz. Collins also produced true transceive on the same frequency within the KWM-1 and KWM2 models and they kept upgrading this S line until 1975 with the 2A model. 1978 saw the release of their all solid state KWM-380 which was the last amateur radio manufactured. Their involvement continues in the military and commercial areas.

- P100 100, 50 and 25 years ago. Covers from each year and a index of the articles in each for January of the years, 1926, 1976 and 2001.



BARG members may care to peruse the library as we do have many of these early copies of QST. Many interesting articles awaiting rediscovery. !!

ITEM OF POSSIBLE INTEREST.

P117 of the Jan 2026 of this QST has an advert for ARRL published book called "BAOFENG RADIO." By John Leonardelli. Item no. 2240 cost USD19.95. Topics including the Popular UV-5R. Rugged UV-82. DMR enabled DR -1801UV, CHIRP programming software, Baofeng radio accessories,

Well, that's the start to a new year of reading. If you get this far and take in the news and wish to follow up on any article covered, please visit the club library or speak to me and arrange to borrow a magazine or a reference book. There is a loan book in the library where u can enter descriptor of a book or magazine. ie QST Jan 1987.... Ur name/callsign / date. When returned sign off and date please. Sometimes another member wants same item and dating and name assists their wait or direct contact to get item. Please sign off on return and place item in the return box in library, Librarian can return and check loan book.

OUR LIBRARY LIKE THE CLUB, WORKS ON A MUTUAL TRUST AND CO OPERATION BETWEEN ALL AND WORKS QUITE WELL. Generally, loans taken home can be borrowed for a month [between visits] and if need longer individuals may contact for return if it.

Cheers Craig VK3KG

Silicon Chip Review January 2026

P3 Publishers Letter. Nicholas Vinen. The myths about Surface Mount Soldering. What tips to use, what flux, what solder and other thoughts.

P12 Acoustic Imaging. Dr David Maddison, VK3DSM. Looks at the history and technology of the day to direction find using sound. As early as the 6th century sound was being investigated by Pythagoras.

P26 Power Electronics. Part 3. Andrew Levido. This time looks at transformers and magnetics in transforming electrical energy for use at many power levels.

P35 DCC Base Station. Tim Blythman. Following on from the decoder the base station construction is shown along with all the features.

P49 Getting Started With DCC. Tim Blythman. An overall look at the system being constructed and some information for those of us new to this type of locomotive control.

P56 Remote Speaker Switch. Julian Edgar and John Clark. A modern switching controller for all the speakers around the house suitable of 100v line systems and power up to 400W/800W

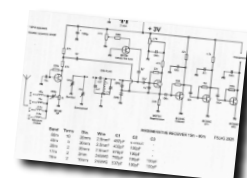
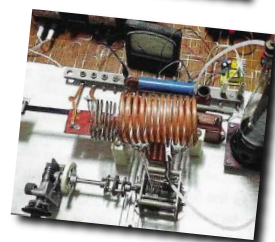
P66 How To Design Printed Circuit Boards. Part 2. Tim Blythman. How to start, plan out and get your components together for your own PCB design.



- P78 Waterproof Touch Switch. Julian Edgar. A product that was bought with one idea in mind to find it was totally different and a unique component.
- P80 Project Earth Radio, Part 2, John Clark. Instructs on the construction of this radio that at VLF and ELF hear mother natures storms, auroras and atmospheric disturbances caused by our sun.
- P88 Serviceman's Log. Some holiday stories from up north.
- P94 Vintage Radio. Rebuilding te Kreisler 11-99. Fred Lever. A valve portable from 1968. Modified with later and TV type valves.

SPRAT Review Winter 2025/2026

- P2 Editorial. Steve G0FUW. Cost of subscription, Club badges, Roger G3XBM is the G3RJV Trophy winner for Construction 2025.
- P3 Valved QRP Report. Paddy G4MAD. A good representative number of members have completed or are constructing valve and valve hybrid transmitting and receiving gear and some mods to vintage gear.
- P8 Experimenters for the Quieter Years. Roger G3XBM. Looks at the digital modes for using QRP when the cycle begins to wane.
- P9 Membership Secretary News. Daphne G7ENA. Some change of office bearers, payment methods for SPRAT.
- P11 Transformer Ringing Tester. Peter G4UMB. A simple circuit to use with a scope to check for shorted turns and low Q in transformers.
- P12 2025 regenerative Receiver. Oliver F5LVG. A six BJT, 3V powered radio with coils for 80, 40, 20, 17, and 15m.
- P15 An Amplified Loop Antenna. Philip M1GWZ. An amplifier for the small loop antenna that comes with some SDR receivers, a three transistor pre-amp makes a considerable difference.
- P19 Digital VFOs for Dummies. Eric ZL2BMI. A look at digital VFO that have evolved over the years and in particular the "Sugar Cube" unit.
- P22 Homebrew Prototyping Board. Patrick M0DDI. Making a simple homebrew board with the essentials in it from the most basic materials.
- P24 On Air Activity Report. Enzo M0KTZ. Reports form many members and what contest and QRP on-air activities to look forward to this Winter/Spring.
- P28 Lifter for "Stealth" GP Antenna. Enrico IZ4AFL/OE7AFT. A lifting rig to put on your roof to lift or hide your vertical antenna.
- P31 CAD for the Inept. Chris G7LQX. Trying chatGPT and looks at how to design panels and other 3D bits and pieces.
- P34 Members News. Chris G4BUE. News and pictures from around the world with news of activities QRP locations.



<http://www.barg.org.au/wp-content/uploads/2024/07/BARG-Form-Membership-Application-Form-was-V3-Rev-PA11.pdf>

BARG Form - Membership Application Form (was V3) Rev PA11.docx



Ballarat Amateur Radio Group Inc
Registration Number A0006953T
ABN 44 247 200 143
Application for Club Membership

This completed document should be emailed to the Secretary at BARG@BARG.ORG.AU, or brought along to a face to face meeting.

Surname: _____ **Given Names:** _____

Callsign: _____

Are you a financial member of WIA?: Yes No

Partner's Name: _____

Residential Address: _____

Postcode: _____

Postal Address: _____
(If different to above) **Postcode:** _____

Telephone;
(Work) _____ (Home) _____ (Mobile) _____

Email Address _____

Unless otherwise requested, Newsletters and Club information will be sent to your email address. If the Club decides to publish a Club Directory, are you willing to have the above information included? Please indicate: **Yes** **No**

By applying for membership I indicate my support of the purposes of the Association and agree to comply with the Association rules in effect.

Applicant's Signature: _____ **Date:** _____

Proposed By: _____ **Callsign:** _____ **Date:** _____

Seconded By: _____ **Callsign:** _____ **Date:** _____

--ooOoo--

Presented to Committee: _____ **Decision:** Accept / Reject

Fee Paid: \$ _____ **Date:** _____ **Receipt No(if applicable:)** _____

Entered into Membership Register: _____ **Secretary:** _____

BARG Form - Membership Application Form (was V3) Rev PA11.docx1 of 1